

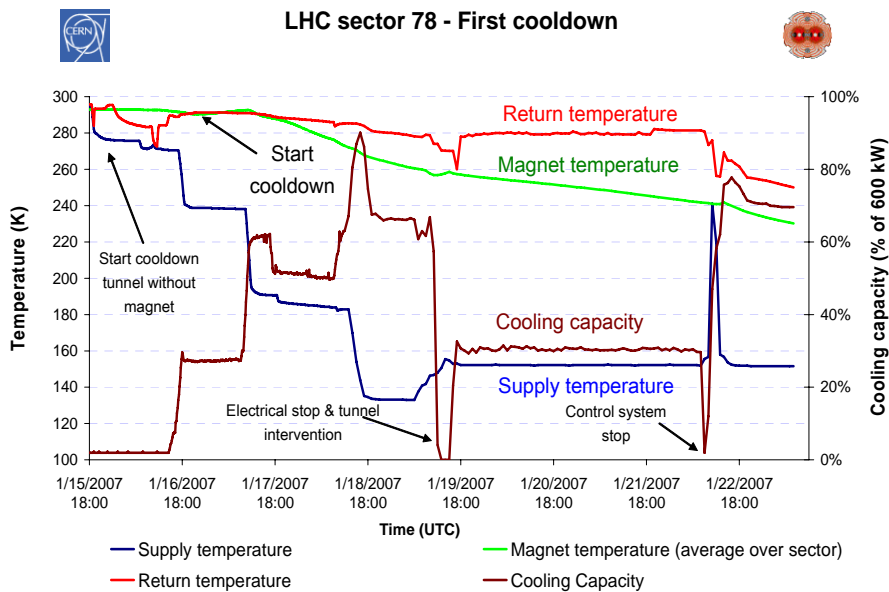
Present: AB/CO: R.Schmidt, R.Lauckner.
AT/ACR: G.Vincent, A.Suraci.
AT/MCS: D.Tommasini.
AT/MEL: P.Chambouvet.
AT/VAC: W.Maan.
TS/HDO: R.Saban, B.Perea, A.Vergara, M.Solfaroli, M.Pojer,
B.Bellesia, C.Fernandez.
TS/IC: E.Barbero.

Preparation of the Cool-Down in Sector 78, 81 and 45.

Sector 78

Cool-Down (G.Vincent):

- The cooldown is going on and is kept so that the gap between the highest and lowest peaks is less than 150K.



- A problem due to the control system is responsible of the two peaks during the night that is possible to see in the picture.

Test of the powering procedure (R.Lauckner):

- The tests should be starting next Tuesday by testing two quadrupole circuits.

Mobile camera:

- The camera will go through the sector 78 (from 7 to 8) on next Thursday late afternoon. It will stop at the DFBs but special requests are welcome.

Current leads (A.Ballarino):

- Intervention on the heating system of the leads took place both in point 7 and in point 8. All the heaters of the leads are now operational, with the exception of the heater of one 600 A lead, where a fuse was found broken. The fuse should be replaced as soon as the access to the tunnel will be re-established.

Vacuum-cryo Interlock test (W.Maan):

- All vacuum sensors in the sector 7-8 have been tested on Friday afternoon (QRL and Magnets). The result is that 7 of 56 sensors do not generate an interlock.

Control and instrumentation activities:

- controls and instrumentation activities performed during the shut down 13-16h of 19Jan07:
 - ✓ hardware repairs in the tunnel and UJ76: 4 teams (of 2 persons) recovered 24 TT channels, and identified the problems with a few others:
 - UJ76: 10 of 16 problems were solved (some still need calibration update);
 - ARC: 13 of 42 problems were solved;
 - UA83: repairs will be done next week, in tight coordination with control room and without touching operational channels;
 - ✓ PLC: update of the algorithms of TTmax, TTmin, TTavg;
 - ✓ SCADA: re-organisation of navigation buttons in all panels, navigation bars, TTavg on "overview" panel;
 - ✓ AB/CO: FEC update algorithms, virtual FT, differential PT, communication QUI-ARC, Logging.

Sector 81- Sector 45

Cryo-instrumentation:

- A.Suraci said that he needs a WIFI in sector 81 with 15 antennas. R.Saban will ask to the IT in order to provide them.
- People from jumper interconnection are taking away the boxes of the cryo-instrumentation. D.Tommasini and E.Barbero will be responsible to prevent this.
- The crates in LSSL1 have been nearly connected and the works are starting now with the mobile crates.
- W.Maan reported that he needs a GSM alarm when an interlock is generated. This will be discussed with I.Laugier and followed by R.Saban.

Current Leads:

- INEO is going to finish working today in LSS4R in DFBAH but FLOHE will not start before next week (week 5) but it will work in all the DFB in parallel.
- NEG tests won't start in week 6 as planned; as a consequence current lead heater tests can go on and continue during the first part of week 6.
- P.Chambouvet reported the presence of some non-conformity on the current leads (cables 1515511 1515512 1515513 1515514 1515516) in point 5L. These have to be corrected by J.C.Guillaume.
- P.Chambouvet is waiting for the NEG activation (Wednesday) in 1L in order to finish the connection of the racks that should be installed by the end of this week.

Warm Magnets in P8:

- Interlock tests are going to be performed today without current in the magnets (short circuits at the level of power converter).
- Working in this area will be forbidden from tomorrow because current will be injected in the magnets for the first time. E.Barbero will confirm this planning today.

Open Issues

AC non-conformity

- 13.11.06 Non-conformity of the crates of cryo instrumentation (inrush current) (A.Suraci: ready next year)
- 13.11.06 Non-conformity of the AC cabling of the crates under the magnets. This concerns ACR, MEL & VAC.

DC cabling

- 19.01.07 Warm Magnet cable positioning to be changed to avoid "antenna" effects (M.Condemine, J.C.Guillaume)
- 22.11.06 Pre-connection of 120A cables in LSSR7 (TS/EL) - PC Non conformities (H.Thiesen)

Instrumentation Cabling

- 12.01.07 Cryo-instrumentation cables: 2 LSS8L connectors (A.Suraci-J-C.Guillaume)
- 10.01.07 Continuity error with cable 1813004A and a wrong housing of 1702440 which should be replaced (D.Bozzini)

Cryogenics

- 16.01.07 Vac-Cryo Interlock tests - window of 1 day needed (P.Cruikshank-F.Millet)

22.11.06 Instrumentation and remote control not fully stable (P.Gayet - F.Millet)

Safety

General remark: written communication in advance to announce operations!!!

23.11.06 Water leak on the tunnel concrete wall to be fixed (C33L8).

Preparation of powering test

30.11.06 EI_QA performed on C16L8. ICC test showed reversed sequence of V-taps on circuit RCBV16.L8B1 (D.Bozzini)

AOB

08.01.07 Re-installation of 3 BLMs interfering with pumping groups (B.Dehning)

13.11.06 BPM connection in Q2 (R.Jones) - waiting for Inner Triplet to be repaired

Closed Issues

Mobile camera installed, tested, fully operational (K.Kershaw)	16.01.07
DFBXG Temperature sensors repaired (R.Rabehl)	16.01.07
Warm magnet transport stuck in the arc 78.	15.01.07
Connection of the NC Magnets in LSS8R (J-C.Guillaume)	15.01.07
DFBX Pumping of Current Leads insulation vacuum (S.Feher, P.Chambouvet)	15.01.07
QPS - 2 cables need repair (R.Denz-D.Tommasini)	12.01.07
DFBXG non-conformity on the current lead heater cables 1821322 and 1821323 (P.Chambouvet-J-C.Guillaume)	12.01.07
Cryo-instrumentation cables: 2 LSS8L + 1 LSS7R to be pulled (A.Suraci-J-C.Guillaume)	15.01.07
Bad positioning of the 13 kA power cable <i>cosses</i> corrected (J-C.Guillaume-P.Denis)	11.01.07
Cryo-instrumentation cables at DFBX inversion sorted out (A.Suraci)	10.01.07
Calibration of the Arc Detectors on the 13 kA EE System (K.Dahlerup-Petersen)	19.12.06
Short-to-ground in QBBI.A21R7 (Lyra side) (D.Bozzini, F.Seyvet)	19.12.06
BPM connection in Q3, Q4, Q5, Q6, Q7 (R.Jones)	15.12.06
DFBAO Functional test on the leads heaters	15.12.06
DFBXG 100V test on current leads (S.Feher)	15.12.06
Repositioning of 1 DC cable on DFBAO and of 2 DV cables on DFBAN (all 13kA) (J.C.Guillaume)	14.12.06

Wooden structure for UA access restriction (that will allow transport)	12.12.06
Non conformity in DFBMH, DFBAN and DFBXG current lead heaters (P.Chambouvet-J-C.Guillaume)	12.12.06
Galvanic insulation installation on all DFBs (AT/MEL)	08.12.06
Re-positioning collars used to fix the WRL to the CLs (all DFBs) (A.Perin-D.Bozzini-F.Millet)	08.12.06
6 kA and 13 kA cables positioning at DFBAO, DFBMA, DFBMC (Flohe)	08.12.06
Functional test on the leads heaters: DFBMA, DFBMC	08.12.06
EIQA-TP4B safety procedure (1900 volts tests!).	07.12.06
Cool down safety procedure & access conditions	07.12.06
Instrumentation cable HV tests in LSS8L (A.Suraci: 4 cables to be tested)	06.12.06
Non-conformity on instrumentation cables (temperature sensors on current leads) (A.Suraci: 3 cables are in repair-Wed.29th)	06.12.06
Quench protection continuity tests and cables assignment LLS7R (DFBMH, DFBAN) and LSS8L (DFBMC, DFBMA and DFBX)	06.12.06
DFBAN cable positioning (J.C.Guillaume)	06.12.06
Access & Safety Cable Installation (full sector) (J.C.Guillaume)	06.12.06
EIQA-TP4-A for all DFBs sector78	04.12.06
Water circulating in UA83 for the Powering Procedure Test: filters checked, installation of flexible cables by CV.	04.12.06
LHCb ODH System ready	04.12.06
Definition of owner of activity and pumping needs for current leads insulation vacuum (DFBX) (S.Feher, R.J.Rabehl)	04.12.06
DFB instrumentation cables to be connected (A.Suraci)	04.12.06
Functional test on the leads heaters DFBMA	04.12.06
Functional test on the leads heaters DFBMC	04.12.06
Non-conformity of the DC cabling of the orbit corrector power converters	04.12.06
Pretest of 60A converters in sector 78, location C16L8.	30.11.06
EIQA-TP4-A on DFBAN, DFBMH, DFBAO LC module	29.11.06
Pumping of insulation vacuum for all DFBs between 7 and 8 (except DFBX)	29.11.06
Functional test on the leads heaters DFBMH	29.11.06
Functional test on the leads heaters DFBAN	28.11.06
Pumping of current lead insulation vacuum DFBAN	25.11.06
120A and 600A positioning on DFBAN and DFBMH (INEO)	25.11.06

Missing labels on DFBAO instrumentation cables	24.11.06
Adjustment of cable length on DFBAO	24.11.06
Prototype of galvanic insulation to be tested at Point 6	23.11.06
Definition of Safety procedure for Powering Procedure Test (aka Dry Runs)	23.11.06
Leaks on DFBAO gas recovery line in repair/installation of helicoflex	22.11.06
21 leak detectors to be placed all along the arc 78	22.11.06
Connections (made by TS/MME) of 120 A cables to be verified (TS/EL)	22.11.06
600 A cable positioning on DFBAO	22.11.06
Pumping of current lead insulation vacuum DFBMH	21.11.06
Pressurized air supply to valve on WRL	21.11.06
Support on DFBAO WRL	21.11.06
Bellows in Q6-Q7 LSS8L which had been damaged, is now repaired	20.11.06
Valve on the WRL is operational	20.11.06
Leak in arc Q11-8L	20.11.06
Cryogenic valve manipulation on DFBX	20.11.06
Removal of some BLMs in conflict with the pumping groups	17.11.06
120 A Cables connection in DFBAO, DFBMC, DFBMA and DFBX LSS8L	17.11.06
DS7R and DS8L leak test finished	17.11.06
Leak in R7 repaired	17.11.06
Q6-Q7 bake-out completed	17.11.06
Current lead vacuum: man power and pumping groups availability	15.11.06
Hydraulic connection of the current leads	15.11.06
DFBX AT/MEL Transformers installation	14.11.06
WRL connection DFBMH LSS7R	14.11.06
ELQA-TP3 test of the sector 78	14.11.06
Polarity tests of the 600A and 120A cables for DFBAN and DFBMH (LSS7R)	14.11.06
QUI available	10.11.06
Pressure tests of QUI and DFBs safety valves finished	10.11.06
QRL valves available for all sector	09.11.06
QRL valve opening/cabling verification	13.11.06
Interconnections DFBAO, DFBMA and DFBMC.	13.11.06
WRL connection at DFBMC, DFBMA and DFBX	13.11.06
120A cables positioning at DFBAO, DFBMA and DFBMC	13.11.06

Q6-Q11L8 leak test envelope

13.11.06

Interconnections of DFBAN and DFBMH

13.11.06

Milestones: Test Schedule

Week 45	Interconnections
End week 46 [18.11.06]	Leak Test
End week 47 [24.11.06]	Pressure Test
Week 47-48	EE sensor tests in RR77
Week 48 & 49	Purge and filling
Week 49	Dry Run
Week 49	Short Circuit tests of 60 A
Week 49 [07.12.06]	Diesel Tests
Week 49	ELQA-TP4B (Phase I)
Week 50	Flushing
Week 50 [15.12.06]	ELQA-TP4B (Phase II)
Week 02 [15.01.07]	ELQA-TP4B (Phase III)
Week 03	Cool Down Sector 78
Week 08	Decision on DFBS clamps disconnection from Sector 78 (to use them in Sect45 and Sect81)



Next RAT meeting

Thursday, January 25th 8:30 @ P8 2889-R-009

Blanca Perea
Matteo Solfaroli